

portable information terminal taking the hinge part 5 as its center. As the case opening and closing detecting unit 9, a switch and the like is usually used. However, a magnetic sensor such as a hall element, a reed relay and the like can be also used. There is a well-known technology which reduces a power consumption by detecting the opening and closing of the case and shutting down the power of the display part when the case is closed. The case opening and closing detecting unit 9 relates to this well-known technology. Note that, in a so-called straight portable telephone, which is not folded, the opening and closing of the case can never occur. Thus, the detecting unit of the present invention is unnecessary.

[0075] The movable display part opening and closing detecting unit 13 is a mechanism for detecting the opening and closing of the movable display part 12. Similar to the case opening and closing detecting unit 9, a switch, a magnetic sensor, a reed relay and the like can be used therefor. The movable display part opening and closing detecting unit 13 is used in performing control of not only saving power consumption by performing display control of the movable display part similarly to the case opening and closing detecting unit 9 but also displaying both a transmitted image and a received image on both the fixed display part 4 and the movable display part 12 when the video telephone function is used in the opened state.

[0076] In the control circuit 17, included are: a CPU; a bus controller for performing internal processing; an interrupting controller; a timer; analog-digital and digital-analog conversion circuits for voice data; a BlueTooth module; and a wireless LAN module.

[0077] A camera control unit 18 takes a role of transmitting control and image data of the camera 10 to the control circuit 17. The camera control unit 18 photographs in accordance with a photographing request sent via the operating part 6 and the control circuit 17, and transmits photographed data to the control circuit 17. If an image photographed by the camera part 10 can be compressed, time occupied by a data bus in the control circuit 17 is shortened. Thus, regardless of a processing state of the control circuit 17, it is desirable that the camera control unit 18 performs data compression. Moreover, the camera control unit 18 may be built in the control circuit 17.

[0078] The antenna 19 is used to transmit and receive a signal. There are various types of transmission/reception systems with the antenna 19; however, the present invention does not particularly stipulate the system.

[0079] A display control unit 20 is for controlling display states of the fixed display part 4 and the movable display part 12 and performs switching among expansion of the received image of the video telephone, which is sent from the control circuit 17, display of the transmitted image and the like.

[0080] The reception circuit 21 is a demodulation circuit of received data, and the transmission circuit 22 is a modulation circuit of audio data to be transmitted after analog-digital conversion. In this diagram, the reception and transmission circuits are separated from the control circuit 17. However, these circuits can be integrated with the control circuit 17. Moreover, a plurality of demodulation circuits are included in a CDMA portable information terminal. However, description in this diagram includes one demodulation circuit.

[0081] A memory 23 is included in the control circuit 17 and refers to various memories such as a ROM, a DRAM and the like. An operating area for screen expansion is also included in the memory.

[0082] FIG. 8 is an example of a flowchart related to power control by On/Off control of the fixed display part 4 and the movable display part 12 in the folding portable information terminal including both the case opening and closing detecting unit 9 and the movable display part opening and closing detecting unit 13, in which the movable display part 12 is opened as described in FIGS. 3 to 6. Usually, when the folding portable information terminal is in the standby state, a power supply to the fixed display part 4 is stopped and only the movable display part 12 is displayed. When the opening of the case is detected by the case opening and closing detecting unit 9 (S101), the control circuit 17 sends an instruction to the display control unit 20 and the control of the display control unit 20 allows the fixed display part 4 to operate. Thus, in turn, a power supply to the movable display part 12 is stopped (S102). When the movable display part 12 is further opened in this state (S103), the movable display part opening and closing detecting unit 13 detects the opening of the movable display part 12. Thus, the movable display part 12 is also displayed simultaneously with the fixed display part 4. Along with the operation of the movable display part opening and closing detecting unit 13, the power supply to the movable display part 12 is started via the display control unit 20 by the control circuit 17, and thus the movable display part 12 is displayed (S104). In this event, the control circuit 17 can change display contents depending on whether the video telephone is used or not.

[0083] When the movable display part 12 is closed (S105), the control circuit 17 turns off the display of the movable display part 12 again (S106). When the case is closed (S108), power consumption can be reduced by turning on the display of the movable display part 12 and turning off the display of the fixed display part 4.

[0084] Note that the power control is not always necessary. It is exemplified herein that there is such a method of the power control. It is also possible to change the object to be displayed during the above-described switching and to change a display mode depending on whether the user is making a phone call or reading a mail.

[0085] As to transmission/reception of an image received in the use of the video telephone and a display operation thereof, description will be made with reference to FIGS. 7 and 9.

[0086] Image data of a video telephone, which sent from a call destination and is inputted from the antenna 19, is inputted to the control circuit 17 via the reception circuit 21 (S201). The reception circuit 21 performs demodulation processing of received analog data and thereafter inputs the demodulated data to the control circuit (S202). The control circuit 17 determines whether or not the inputted data can be processed as an image or an audio (S203 and S205). According to the determination result, if the data can not be processed, the data is abandoned (S204). Then, the control circuit 17 itself performs processing such as preparation of a dummy image (S205).

[0087] The image data inputted to the control circuit 17 is expanded by utilizing the memory 23 as a work area in such